



**ANNUAL REPORT**  
**on the**  
**AIR TOXICS HOT SPOTS PROGRAM**  
**JULY 2004**

**INTRODUCTION:** The Air Toxics "Hot Spots" Information and Assessment Act of 1987 is a State of California public right-to-know law requiring air quality management and air pollution control districts to collect information about the location, type, and quantity of toxic compounds emitted into the air from local businesses. Section 44363 of the California Health and Safety Code requires the District to prepare an annual report describing priorities and categories used to assess emissions and to summarize the results and progress of the health risk assessment program. This report covers the period from July 1, 2003 through June 30, 2004, and summarizes the District's efforts to implement the Air Toxics Hot Spots (ATHS) Program.

**THE PROGRAM:** The District has been implementing the ATHS Program since its adoption. Sources known to emit toxic compounds, large sources of criteria pollutants and sources described by certain standard industrial codes were required to submit toxic emission inventory plans (TEIP). The TEIP described which toxic compounds were released and how they would be quantified. After the District reviewed and approved each plan, sources subject to the Program were required to submit a toxic emission inventory report (TEIR) which listed each compound emitted according to the device, stack or release point and identified the maximum hourly and annual emissions in pounds.

The District reviewed each TEIR and determined a prioritization score according to the California Air Pollution Control Officer's Association (CAPCOA) Prioritization Guidelines. Sources with prioritization scores equal to or less than one (1.0) were exempted from the ATHS Program. If the prioritization score was equal to or greater than 1.0 but less than 10.0 the source was maintained as an intermediate level or "District Update" facility. Sources with prioritization scores exceeding ten (10.0) were required to submit a health risk assessment (HRA) to the District.

An HRA is a health conservative estimate of the potential excess cancer risk that could result from exposure to the emitted compound(s) for 24 hours per day for 70 years. The HRA also assesses short term or acute exposure and long term or chronic exposure impacts from non-cancer causing substances. After District review, the HRA is forwarded to the Office of Environmental Health Hazard Assessment (OEHHA) for further review.

A source with a risk of less than one (1.0) in-a-million and health hazard indices of less than one tenth (0.1) is exempt from the Program, regardless of prioritization score. Sources with a prioritization score or risk greater than 10.0 in-a-million or health hazard indices greater than 1.0 are considered to be a State Tracking Facility. These thresholds are summarized in the following table.

	Low Level Exempt	Intermediate Level District Update Facility	High Level State Tracking Facility
Prioritization Scores	$\leq 1.0$	$>1.0 \leq 10.0$	$> 10.0$
Risk (X-in-a-million)	$< 1.0$	$\geq 1.0 \leq 10.0$	$> 10.0$
Health Hazard Index	$< 0.1$	$\geq 0.1 \leq 1.0$	$> 1.0$

If an HRA were to indicate a potential cancer risk of ten (10.0) in-a-million or greater or a health hazard index

for chronic or acute non-cancer health impacts of greater than one (1.0), the emission source would be required to notify the impacted neighborhood and to submit a risk reduction audit and remediation plan. The risk reduction plan specifies how the source would reduce their risk to below the notification thresholds. After District approval, the source would have as much as five years to make the changes, depending on the health impact and availability of equipment to reduce the risk. To date, none of the HRAs submitted for local sources and reviewed by the District have triggered the public notification requirement.

One exception to the above process is made for “industry-wide” category sources, which include crematories, dry cleaners, auto body shops, gasoline dispensing facilities, hospitals using ethylene oxide sterilizers, printers, and wastewater treatment facilities. Instead of having the individual source submit a plan and report, the District completes a screening risk assessment for each qualifying industry-wide source based on annual emission inventory submittals.

Most of the local industry-wide sources were evaluated based on their emission inventory submittals. Results indicated that all crematories, auto body shops, hospitals using ethylene oxide sterilizers, printers, and wastewater treatment facilities in the District were exempt from the ATHS Program, as prioritization scores were less than 1.0. A preliminary screen of gasoline dispensing facilities has determined that 17 service stations may exceed the notification thresholds. However, dry cleaning and gasoline dispensing facilities are still under evaluation pending approval of the CAPCOA industry-wide risk assessment guidelines for dry cleaning facilities and finalization of State guidelines for risk reduction audits and plans for both source types.

The ConocoPhillips Santa Maria Facility and the California Men's Colony were reprioritized from intermediate to high priority based primarily on potential risk from existing diesel engines. Although the diesel engines were reported in the past, new health risk factors for diesel particulate emissions are now available to quantify the risk. Staff is currently evaluating Health Risk Assessment Protocols for each facility. Health Risk Assessments for these facilities will be due later this year.

The remaining non-industry-wide sources are currently exempt from ATHS reporting. However, the District is evaluating several sources with prime and standby diesel fueled engines to see if a reprioritization is necessary.

Newly installed or modified facilities are not subject to the ATHS Program as long as they are incorporated in the District's permit program, evaluated for risk, and an Authority to Construct and/or Permit to Operate is issued by the District for the new or modified equipment. Risk is evaluated for new and modified facilities in accordance with District Rule 219, Toxics New Source Review.

**WHAT'S NEW?:** A new OEHHA ATHS Program Guidance Manual for Preparation of Health Risk Assessments was released in August 2003. In addition, the California Air Resources Board finalized the HotSpots Analysis and Reporting Program (HARP) in December 2003. HARP utilizes the OEHHA Guidance, current health risk values and risk assessment methodology to perform dispersion modeling and calculation of health risk. CAPCOA prioritization guidelines are also being developed that follow the new methodology.

**CONTROL MEASURES:** State Air Toxic Control Measures (ATCMs) for the control of particulate matter from diesel engines are being finalized. Staff are currently tracking and permitting stationary diesel engines to ensure compliance with the ATCM requirements. The Air Resources Board is surveying the dry cleaning industry in preparation for a new or revised ATCM for perchloroethylene. The District continues to implement and enforce all existing ATCMs.

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